

REMARKS

Claims 1 and 5-8 are all the claims pending in the application. Claim 1 has been amended to include the subject matter of claim 3, which has been canceled, and based on, for example, page 6, lines 18-20 and page 18, lines 3-5 of the specification.

Entry of the above amendments is respectfully requested.

I. Response to Rejection of Claims 1, 3 and 5-8 under 35 U.S.C. § 112, first paragraph

Claims 1, 3 and 5-8 are rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement.

The rejection is respectfully traversed.

To satisfy the written description requirement, a patent specification must describe the claimed invention in sufficient detail so that one skilled in the art can reasonably conclude that the inventor had possession of the claimed invention. *See* MPEP § 2163.

The usual manner in which an Applicant can show possession of the claimed invention is by describing the claimed invention with all of its limitations using descriptive means such as words, structures, figures, diagrams and formulas that fully set forth the claimed invention.

It is submitted that one skilled in the art would clearly recognize that Applicants were in possession of a surface substrate film comprising a mixture of a LDPE and a HDPE and ultraviolet absorber. The specification discloses that the spectral transmittance of the surface substrate film is in a wavelength region of from 200 to 380 nm falls within a range of 0 to 20% with the presence of a UV absorber. The specification also discloses the preferable amount of the UV absorber and various examples of the absorber at pages 7-10 of the specification. The specification also includes at least one example where an ultraviolet absorber is used.

Thus, given the disclosure in the specification, claim 1 is adequately supported by the written description in the specification and complies with the requirements of 35 U.S.C. § 112, first paragraph.

Nonetheless, claim 1 has been amended to advance prosecution.

In view of the above, withdrawal of the rejection is respectfully requested.

II. Response to Rejection of Claim 3 under 35 U.S.C. § 112, second paragraph

Claim 3 is rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite. Claim 3 has been canceled, and thus it is submitted that this rejection is moot. Accordingly, withdrawal is respectfully requested.

III. Response to Rejection of Claims 1, 3, 5 and 7-8 under 35 U.S.C. § 103(a)

Claims 1, 3, 5 and 7-8 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Ukei et al. (US 2005/0058829) in view of Endo et al. (US 6,872,447).

The rejection is respectfully traversed.

Claim 1 is directed to a motor vehicle brake disc antirust film comprising a surface substrate film having a tensile modulus of elasticity of 240 to 1500 MPa and a pressure-sensitive adhesive layer on one surface of the surface substrate film, wherein the pressure-sensitive adhesive layer has a thickness of 1 to 300 μm and the surface substrate film has a thickness of 20 to 200 μm and the surface substrate film is a polyethylene resin film composed of a mixture of a low density polyethylene resin having a density of 0.923 to 0.933 g/cm^3 and a high density polyethylene resin having a density of 0.950 to 0.959 g/cm^3 in a ratio of 50 to 90 parts by mass of the low density polyethylene resin relative to 100 parts by mass of the mixture, and an ultraviolet absorber in a proportion of 0.01 to 20 parts by mass relative to 100 parts by mass of the surface substrate film in such way that the spectral transmittance of the surface substrate film in a wavelength region from 200 to 380 nm falls within a range of 0 to

20%, and the polyethylene resin film is prepared with an inflation film molding method.

As recited in claim 1, in the present invention, the polyethylene resin film is prepared with an inflation film molding method. Generally, plastic films, such as polyethylene resin films, can be made by a flat film molding method or an inflation film molding method. In the inflation film molding method, the thin film of the polyethylene resin is prepared by the following process.

First, the melted polyethylene resin extruded from the extruder flows through an annular channel (that is, circular die) and is shaped into a tube film. Immediately, after the melted polyethylene resin film emerges from the circular die, air pressure is applied within the tube to inflate it. The tube of the polyethylene resin is inflated by blowing air into the tube. The inflated tube is pinched off by a wide nip roll to maintain the air pressure. The inflated tube (that is, bubble) is cooled by air coming from a cooling ring on the die outlet. As the bubble grows in both directions (TD and MD), the polyethylene resin film is stretched along MD, and the polyethylene resin film is blown up along TD. The inflated tube of the polyethylene resin is collapsed at the nip point. The tube is slit by inserting razor blades into the folds of the collapsed tube downstream of the nip rolls. The two slit films are transported by separate systems of rolls to two different winding stations to obtain the thin film of the polyethylene resin.

As the polyethylene resin film prepared with an inflation film molding method is prepared by the above process, the polyethylene resin film prepared with an inflation film molding method has a flat surface. Accordingly, the polyethylene resin film of the present invention prepared with an inflation film molding method does not have an uneven portion having a shape extending in the vertical direction against the longitudinal direction being disposed on one side of the supporting substrate.

Contrary to the present invention, Ukei discloses:

- At [0029], "Also, it is important that the pressure-sensitive adhesive tape of the invention has a supporting substrate made of a plastic film and a pressure-sensitive adhesive layer formed on at least one side of the supporting substrate, an uneven portion having a shape extending in the vertical direction against the longitudinal direction being disposed on one side of the supporting substrate. Since the pressure-sensitive adhesive tape of the invention has the foregoing construction, it has excellent hand cutting properties. For this reason, the pressure-sensitive adhesive tape of the invention can be easily and safely cut by fingers without need of cutting using a cutting tool such as scissors and knives. Accordingly, it is possible to prevent an adherend from injury by the cutting tool and to greatly enhance the workability during cutting."
- At [0042], "In the invention, an uneven portion having a shape extruding in the width direction (vertical direction against the longitudinal direction) is formed on one side of the plastic film as the supporting substrate."
- At [0044], "In the invention, it is preferable that the uneven portion is disposed in a linear or curved state (such as a zigzag state and a waveform state). For example, as shown in FIGS. 3A and 3B, there is enumerated a shape in which linear concave portions are formed in the width direction. FIGS. 3A and 3B each is a schematic view to partially show one example of the structure of the plastic film constituting the pressure-sensitive adhesive tape of the invention, in which FIG. 3A is a plan view seen from the upper side, and FIG. 3B is a sectional view. In FIGS. 3A. and 3B, linear concave portions having a section of a quadrangular prism shape are provided in the width direction of a longitudinal strip-like plastic sheet. Incidentally, in FIGS. 3A and 3B, 1 denotes a plastic film; 2 denotes a concave portion; d denotes a width of the concave portion 2; L denotes a pitch interval of the concave portion 2; h denotes a depth of the concave portion 2; X denotes the longitudinal direction of the plastic film 1; and Y denotes the width direction of the plastic film 1, respectively."
- At [0045] to [0047], sizes of "h", "d" and "L" are disclosed.

Thus, in Ukei, it is important that the pressure-sensitive adhesive tape of the invention has an uneven portion having a shape extending in the vertical direction against the longitudinal direction being disposed on one side of the supporting substrate. Accordingly, it is submitted that Ukei does not disclose a polyethylene resin film prepared by an inflation film molding method.

In addition, since the pressure-sensitive adhesive tape of Ukei has the foregoing construction, it has excellent hand cutting properties. For this reason, the pressure-sensitive

adhesive tape of Ukei can be easily and safely cut by fingers without need of cutting using a cutting tool such as scissors and knives. Accordingly, it is possible to prevent an adherend from injury by the cutting tool and to greatly enhance the workability during cutting.

Furthermore, it is submitted that Ukei does not disclose the effects of the present invention. The motor vehicle brake disc antirust film of the present invention, does not have excellent hand cutting properties. The effects of the present invention are that the antirust film is not peeled off when a motor vehicle is being transported on a carrier car or when a completed motor vehicle is being subjected to a running, and the staining of the adherend is not caused when the antirust film is peeled off from the adherend, as shown in Examples described in the present specification. In the Examples of the present invention, the pressure-sensitive adhesive films of the present invention were adhered onto the surface of an aluminum wheel of a motor vehicle and the motor vehicle was driven, at a speed of 80 km/hour for 60 minutes. During the running, strong wind power was applied to the pressure-sensitive adhesive films of the present invention. However, the pressure-sensitive adhesive films of the present invention were not peeled and were not broken. Accordingly, in view of the effects of the present invention, it is submitted that one of ordinary skill in the art at the time of the invention would not have arrived at the claimed invention based on Ukei.

Moreover, in the Examples and Comparative Examples of Ukei, "LDPE-1", "LDPE-2", "LDPE-3" and "LDPE-4" are used as the low-density polyethylene, and "HDPE-1" and "HDPE-2" are used as the high-density polyethylene. The density of LDPE-1 is 0.919 g/cm^3 , the density of LDPE-2 is 0.919 g/cm^3 , the density of LDPE-3 is 0.926 g/cm^3 , and the density of LDPE-4 is 0.922 g/cm^3 . Accordingly, the densities of LDPE-1, LDPE-2, LDPE-3 and LDPE-4 are in the range of 0.910 g/cm^3 to 0.929 g/cm^3 , which is the range of the preferable densities of the low-density polyethylene described in paragraph [0039] of Ukei.

The density of HDPE-1 is 0.964 g/cm³ and the density of HDPE-2 is 0.956 g/cm³. Accordingly, the densities of HDPE-1 and HDPE-2 are in the range of 0.950 g/cm³ to 0.965 g/cm³, which is the range of the preferable densities of the high-density polyethylene described in paragraph [0039] of Ukei.

In all of the Comparative Examples of Ukei, LDPE-1, LDPE-3 and LDPE-4 are used as the low-density polyethylene, and HDPE-1 and HDPE-2 are used as the high-density polyethylene. As described above, the densities of "LDPE" used in all Comparative Examples are in the range of the preferable densities of the low-density polyethylene described in paragraph [0039] of Ukei. Also, the densities of "HDPE" used in all Comparative Examples are in the range of the preferable densities of the high-density polyethylene described in paragraph [0039] of Ukei.

However, all of the Comparative Examples of Ukei exhibit bad effects. That is, none of the Comparative Examples of Ukei exert the effects of the invention of Ukei. Therefore, the Examiner cannot ignore the results of the Comparative Examples of Ukei and the fact that the Comparative Examples are inconsistent with the teaching in Ukei that "especially preferable LDPE having a density of from 0.910 g/cm³ to 0.929 g/cm³ and especially preferable HDPE having a density of from 0.950 g/cm³ to 0.965 g/cm³".

The Examiner asserts that the arguments regarding the inconsistency of Ukei must be supported by a declaration or affidavit. However, it is submitted that inconsistencies of Ukei are based on the disclosure of Ukei and can be determined based on the disclosure of the reference itself and thus, there is no need for the arguments to be presented in a declaration or affidavit.

For at least the foregoing reasons, it is respectfully submitted that Ukei does not render obvious claim 1.

Accordingly, withdrawal of the rejection is respectfully requested.

IV. Response to Rejection of Claim 6 under 35 U.S.C. § 103(a)

Claim 6 is rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Ukei in view of Endo et al. (US 6,872,447) and Watanabe et al. (US 5,795,650).

The rejection is respectfully traversed.

Since claim 6 depends from claim 1, it is submitted that claim 6 is patentable for at least the same reasons as claim 1. Accordingly, withdrawal of the rejection is respectfully requested.

V. Conclusion

In view of the above, reconsideration and allowance of claims 1 and 5-8 is respectfully requested.

If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

/Keiko K. Takagi/
Keiko K. Takagi
Registration No. 47,121

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: March 7, 2011